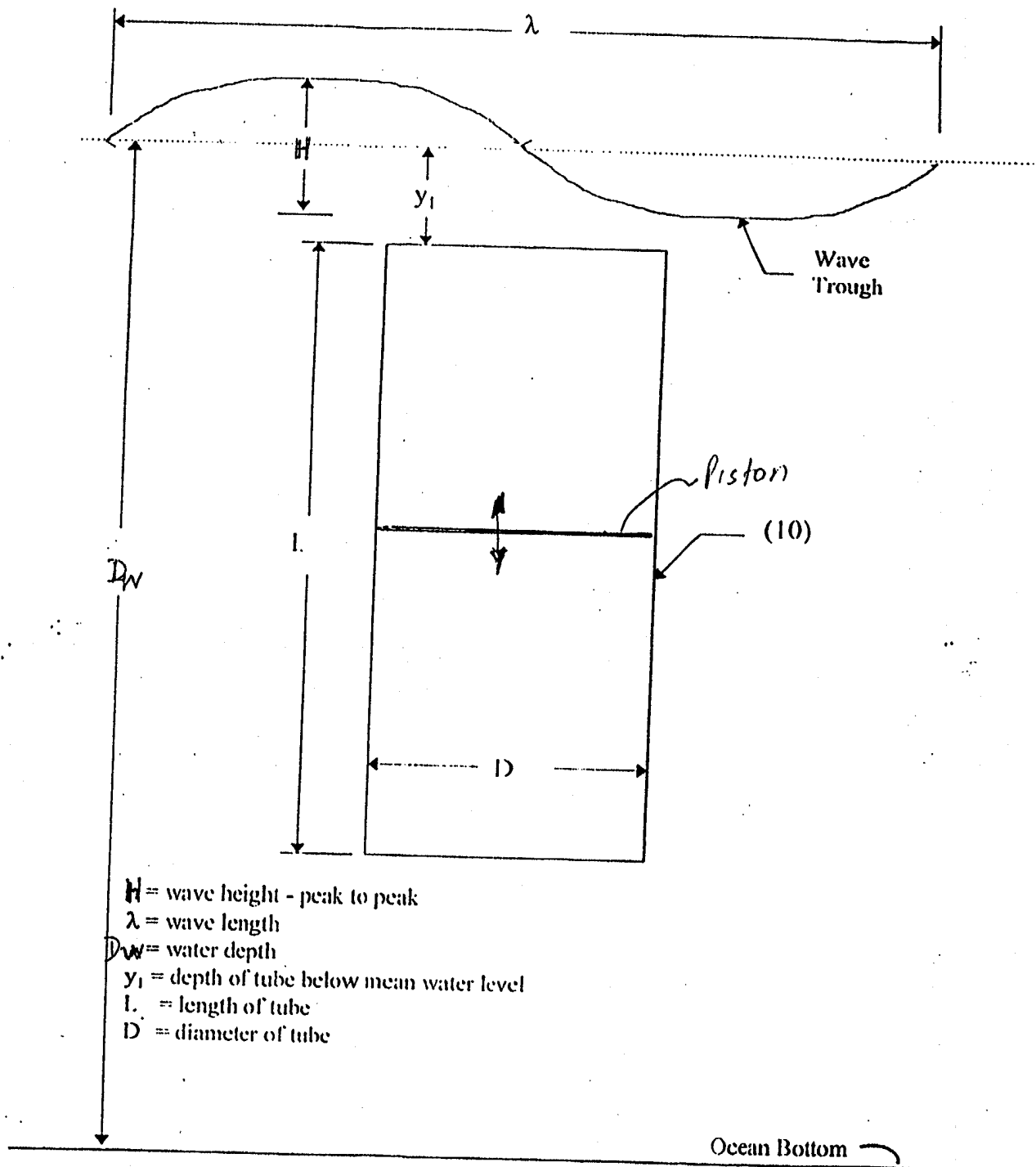


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- H = wave height - peak to peak
- λ = wave length
- D_w = water depth
- y_1 = depth of tube below mean water level
- l = length of tube
- D = diameter of tube

Figure 1

The diagram illustrates a wave energy converter system. A wave with wavelength λ and height h is shown. The device consists of a central piston (12) connected to a hydraulic cylinder (20) and a hydraulic cylinder rod support (22). The piston is connected to a hydraulic motor and electric generator (40) via a shaft (26). The device is labeled with various components: (18) for the upper and lower chambers, (22) for the rod support, (20) for the cylinder, (12) for the piston, (26) for the shaft, and (40) for the motor and generator. The diagram also shows the wave trough and the device's vertical displacement y_1 .

Figure 2A

Ocean Bottom

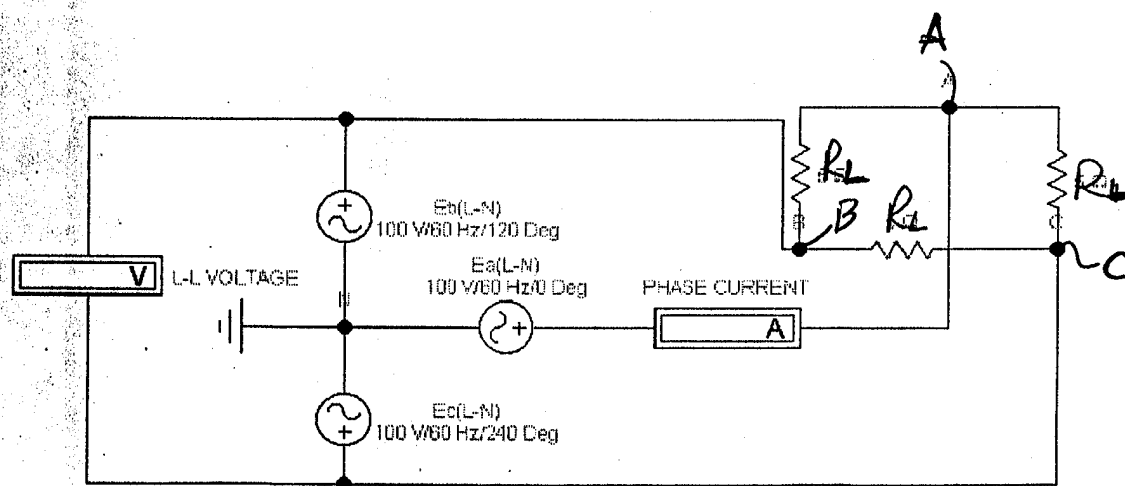


Figure 3 Three ϕ Generator, Δ Connected Load

10047768-01503

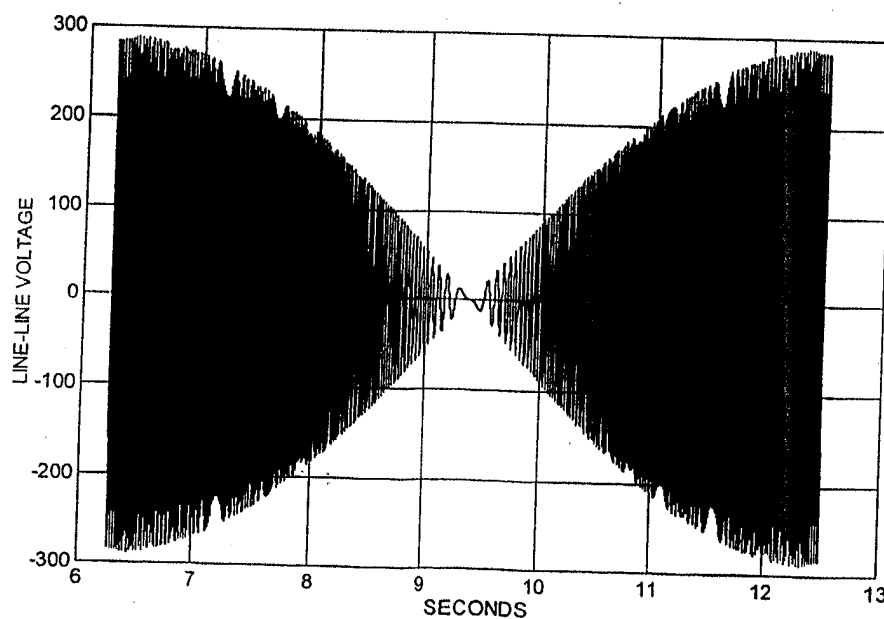
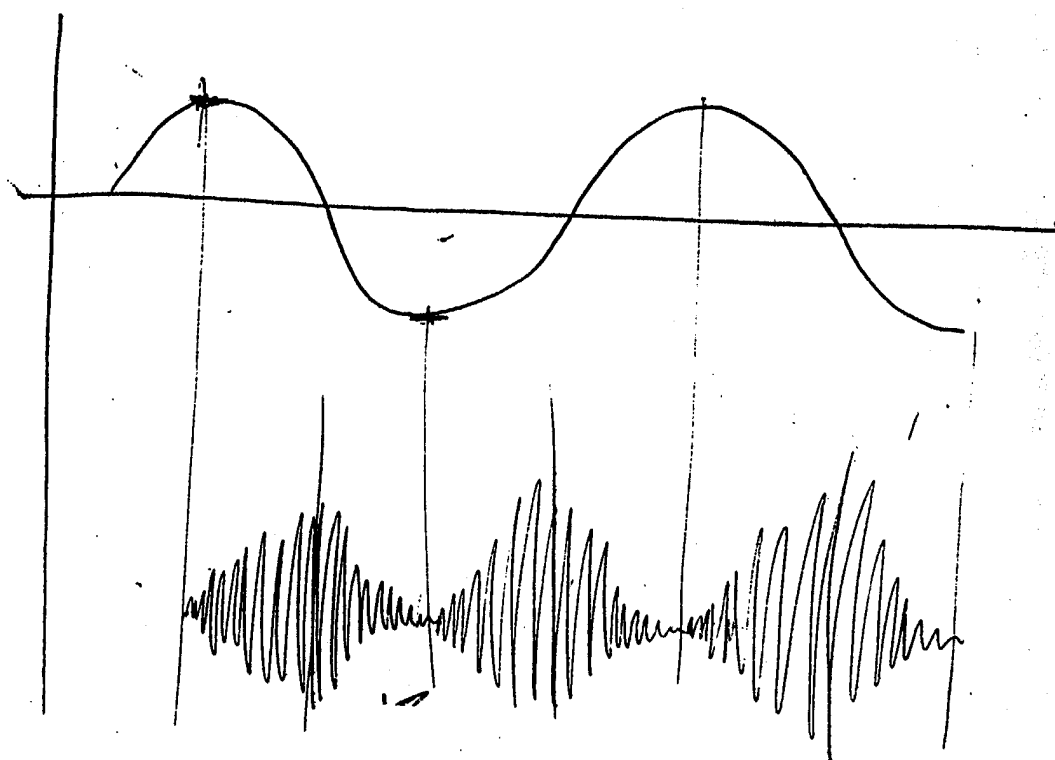


Figure 4 Modulated Generator Voltage

20570-892400

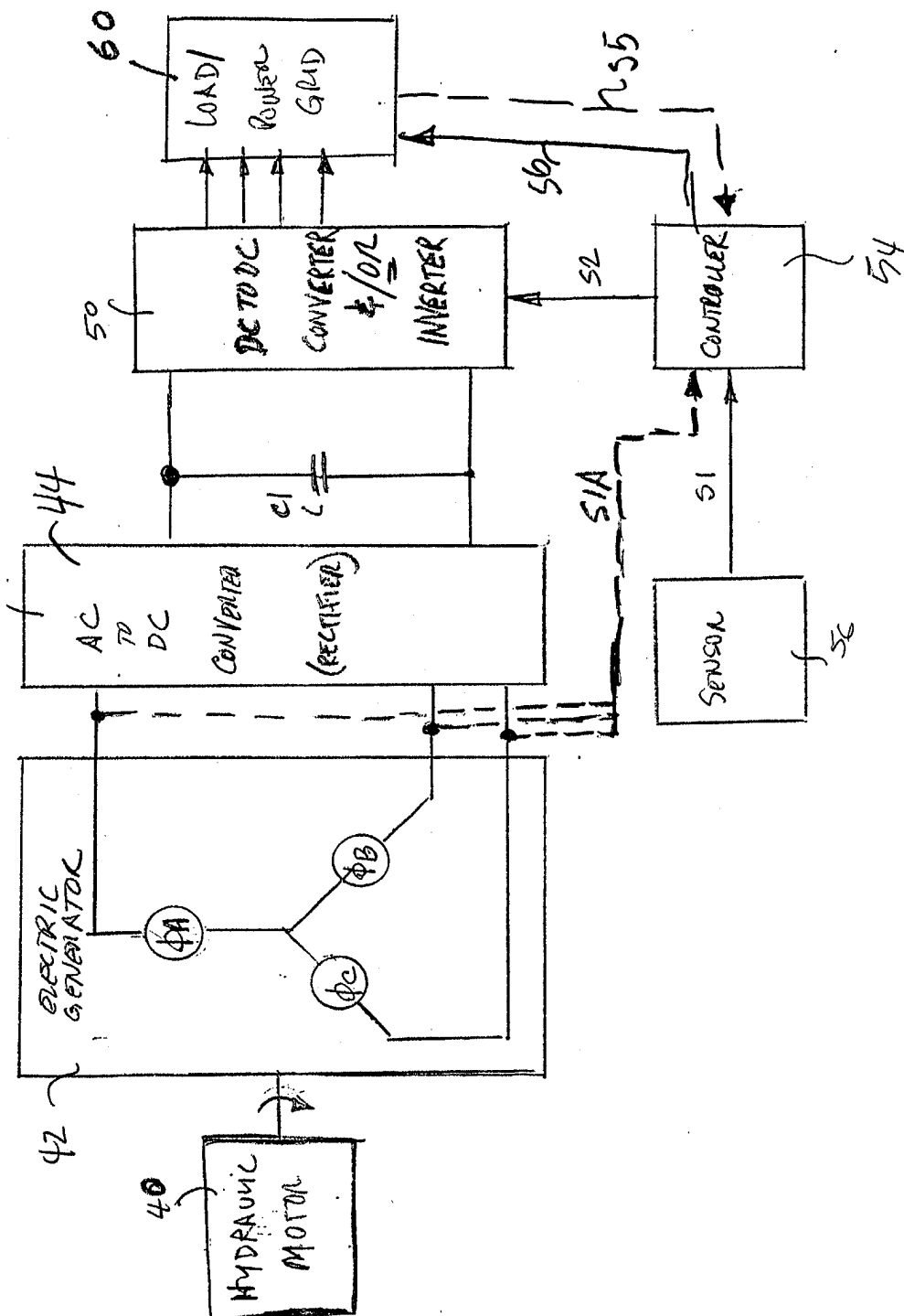
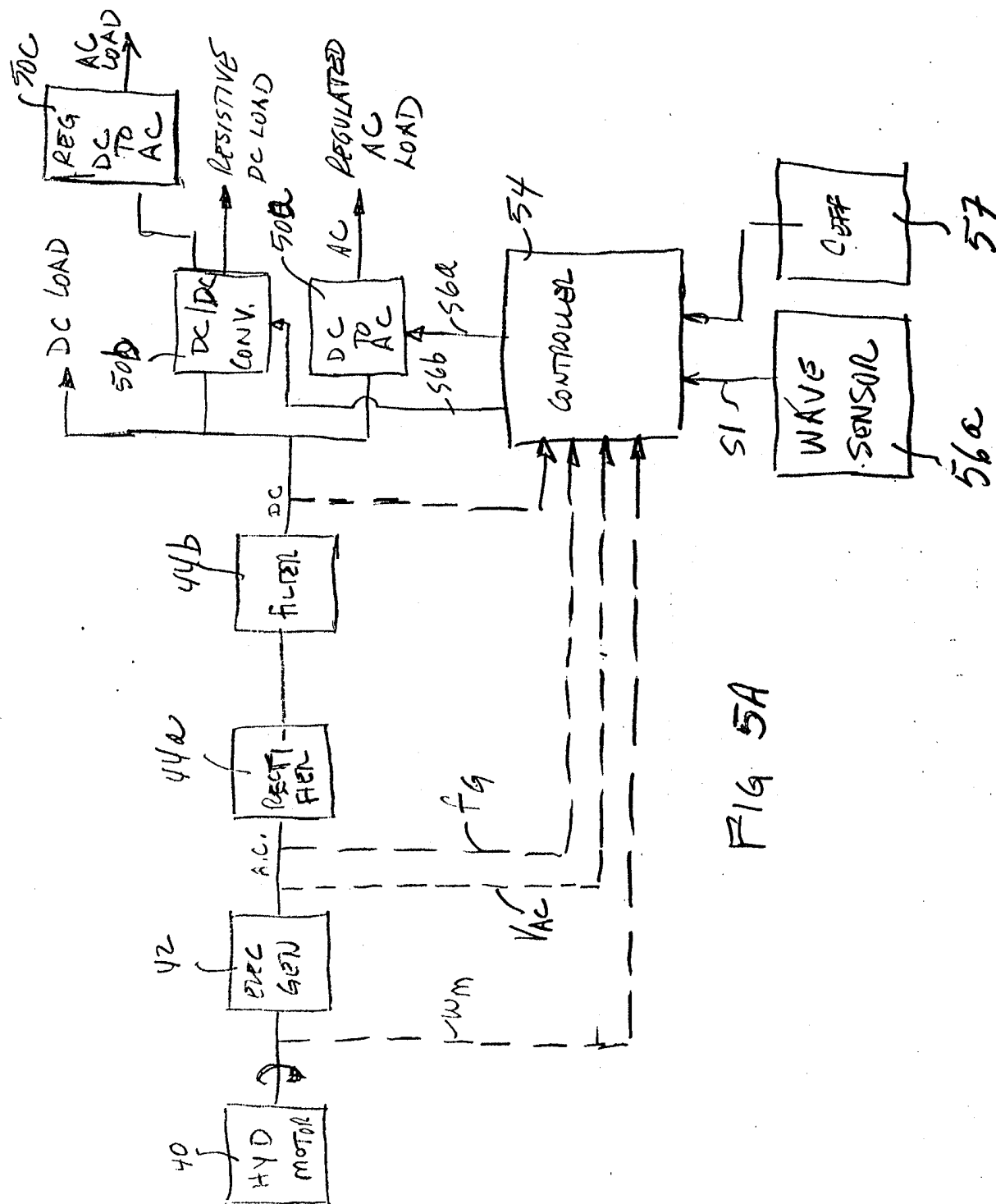


Fig 5

001	001
002	002
003	003
004	004
005	005
006	006
007	007
008	008
009	009
010	010
011	011
012	012
013	013
014	014
015	015
016	016
017	017
018	018
019	019
020	020
021	021
022	022
023	023
024	024
025	025
026	026
027	027
028	028
029	029
030	030
031	031
032	032
033	033
034	034
035	035
036	036
037	037
038	038
039	039
040	040
041	041
042	042
043	043
044	044
045	045
046	046
047	047
048	048
049	049
050	050
051	051
052	052
053	053
054	054
055	055
056	056
057	057
058	058
059	059
060	060
061	061
062	062
063	063
064	064
065	065
066	066
067	067
068	068
069	069
070	070
071	071
072	072
073	073
074	074
075	075
076	076
077	077
078	078
079	079
080	080
081	081
082	082
083	083
084	084
085	085
086	086
087	087
088	088
089	089
090	090
091	091
092	092
093	093
094	094
095	095
096	096
097	097
098	098
099	099
100	100



CSM1904A
3 Phase Output
n=neutral

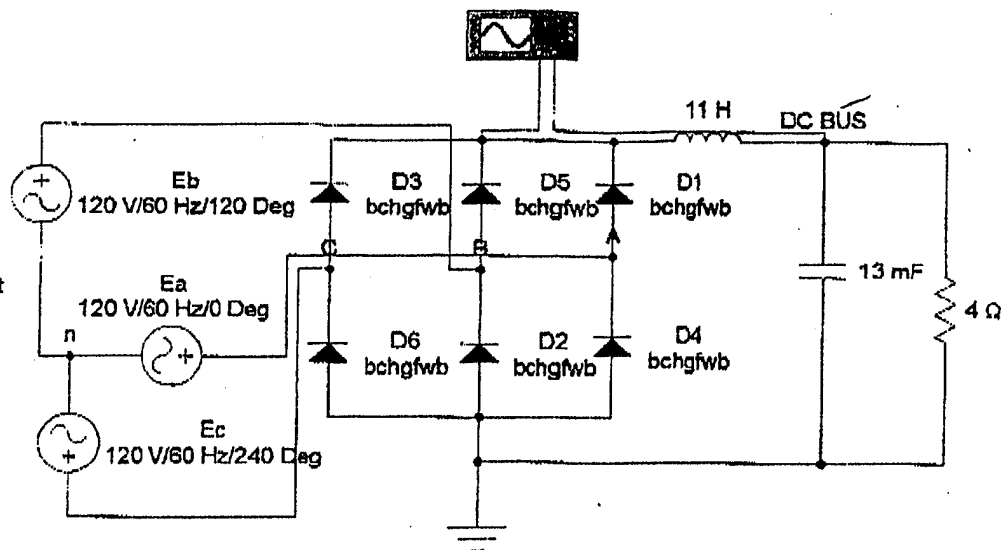


FIG. 6

1004768.01503

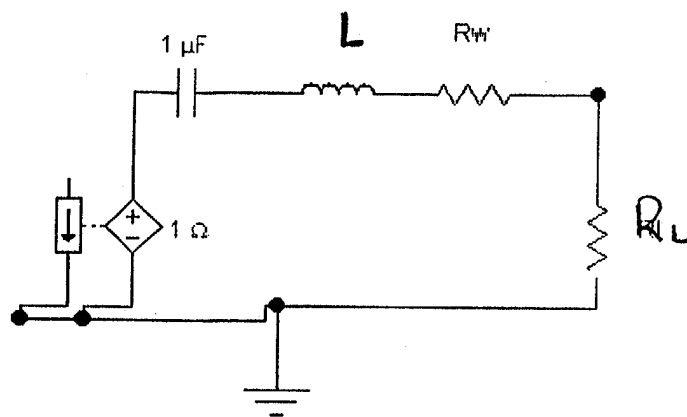


Figure 7. Generator Load Configuration

10047768.01502

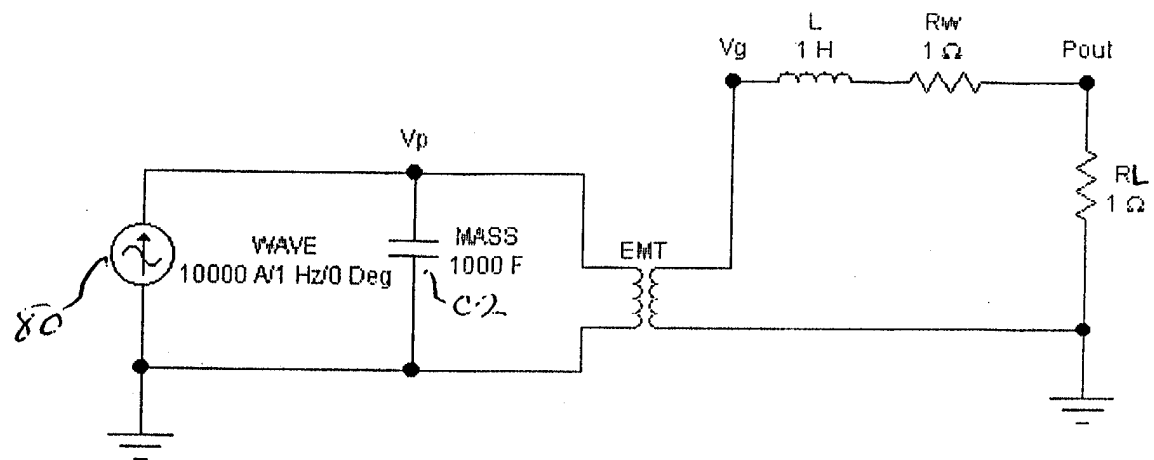


FIG 8 - ELECTRO-MECHANICAL
EQUIVALENT CIRCUIT

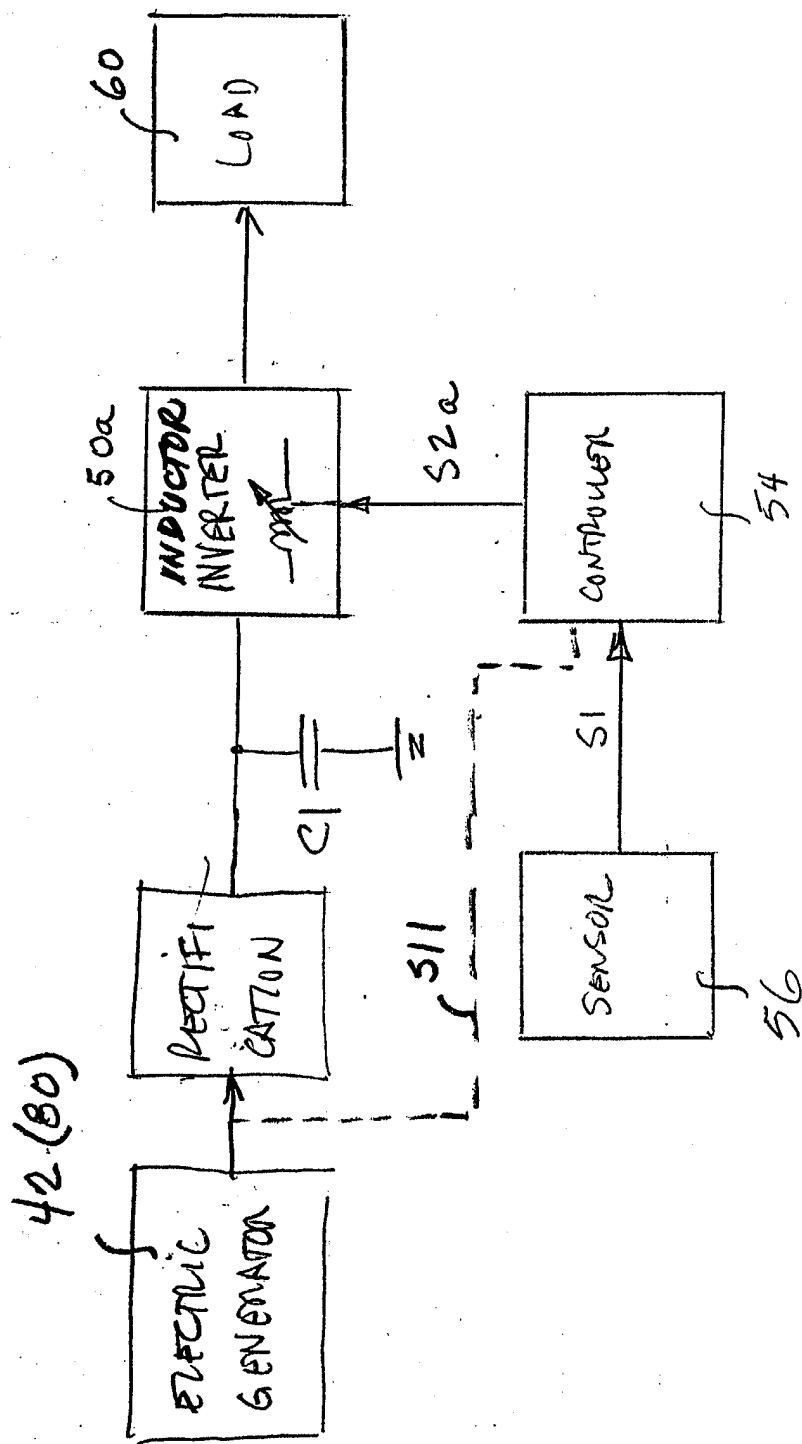
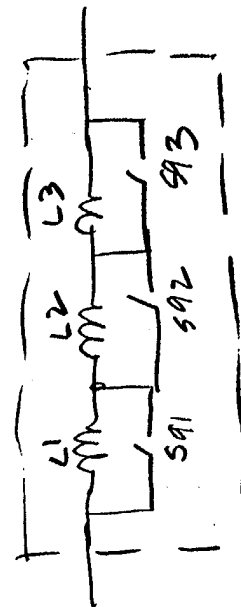
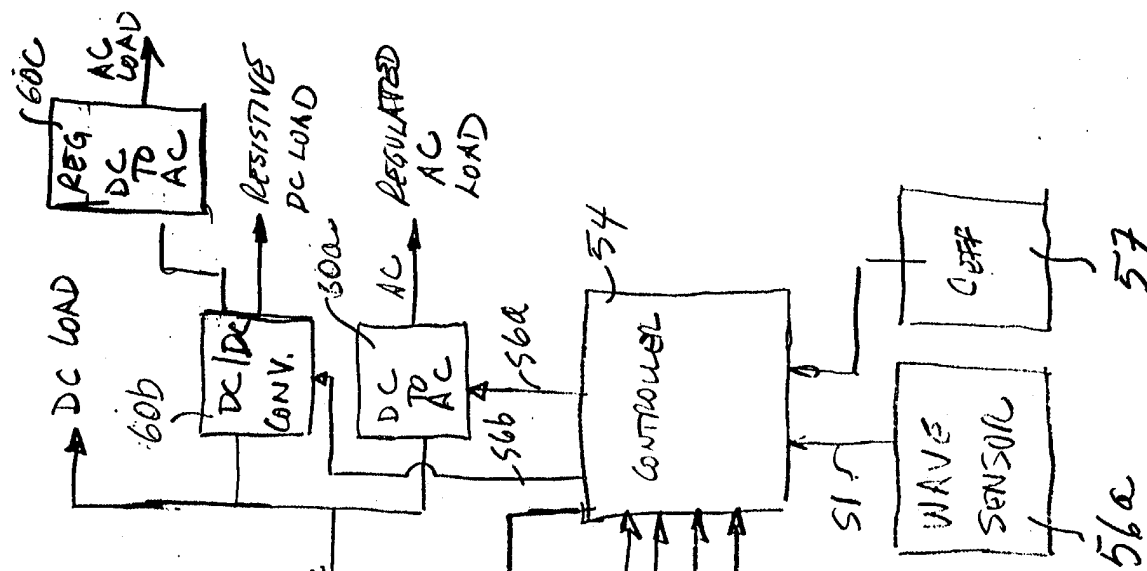


Fig 9

[illegible]

205710" 892400T

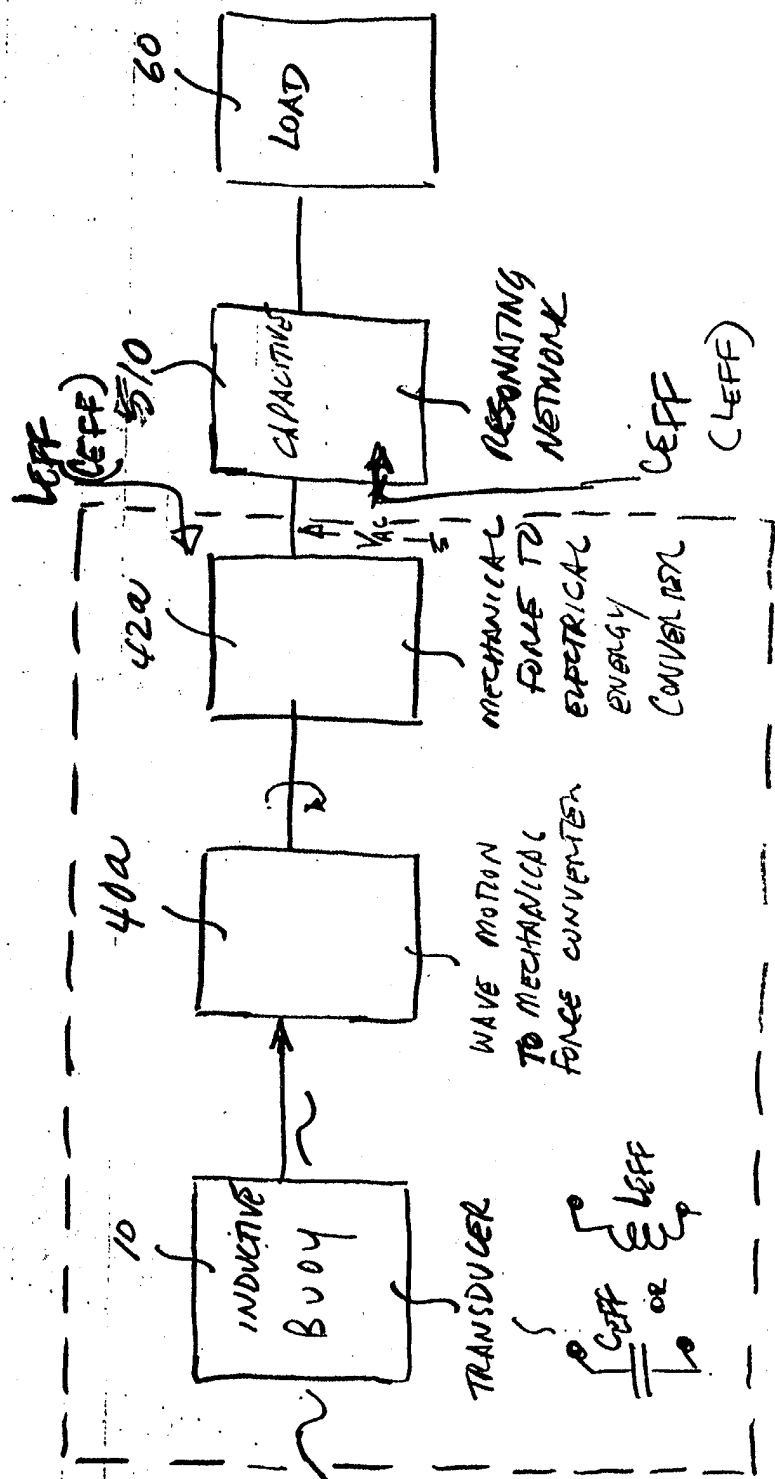
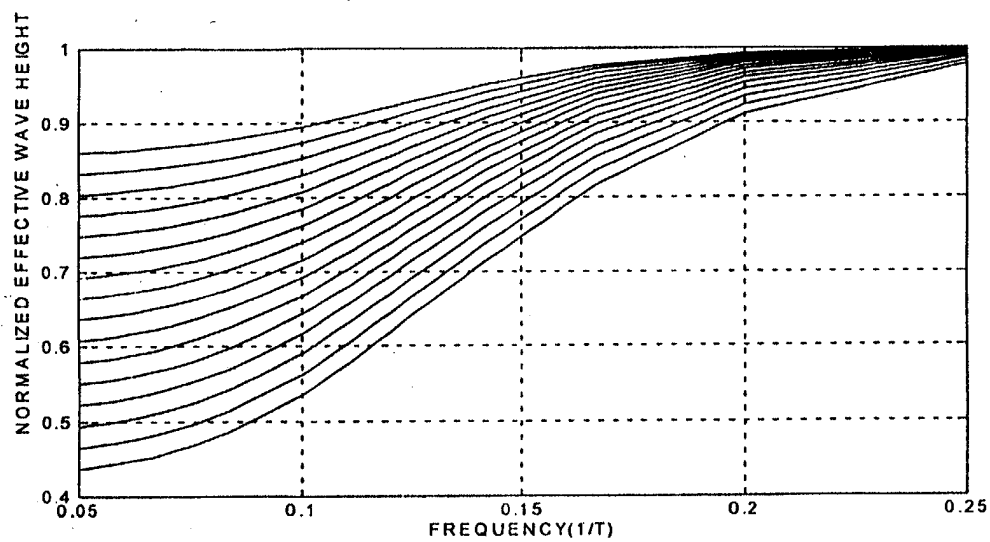


FIG 10

1001768.04150
205170" 894400T



Effective Wave Height vs. Frequency (Period)

Fig 11

30570 33400T

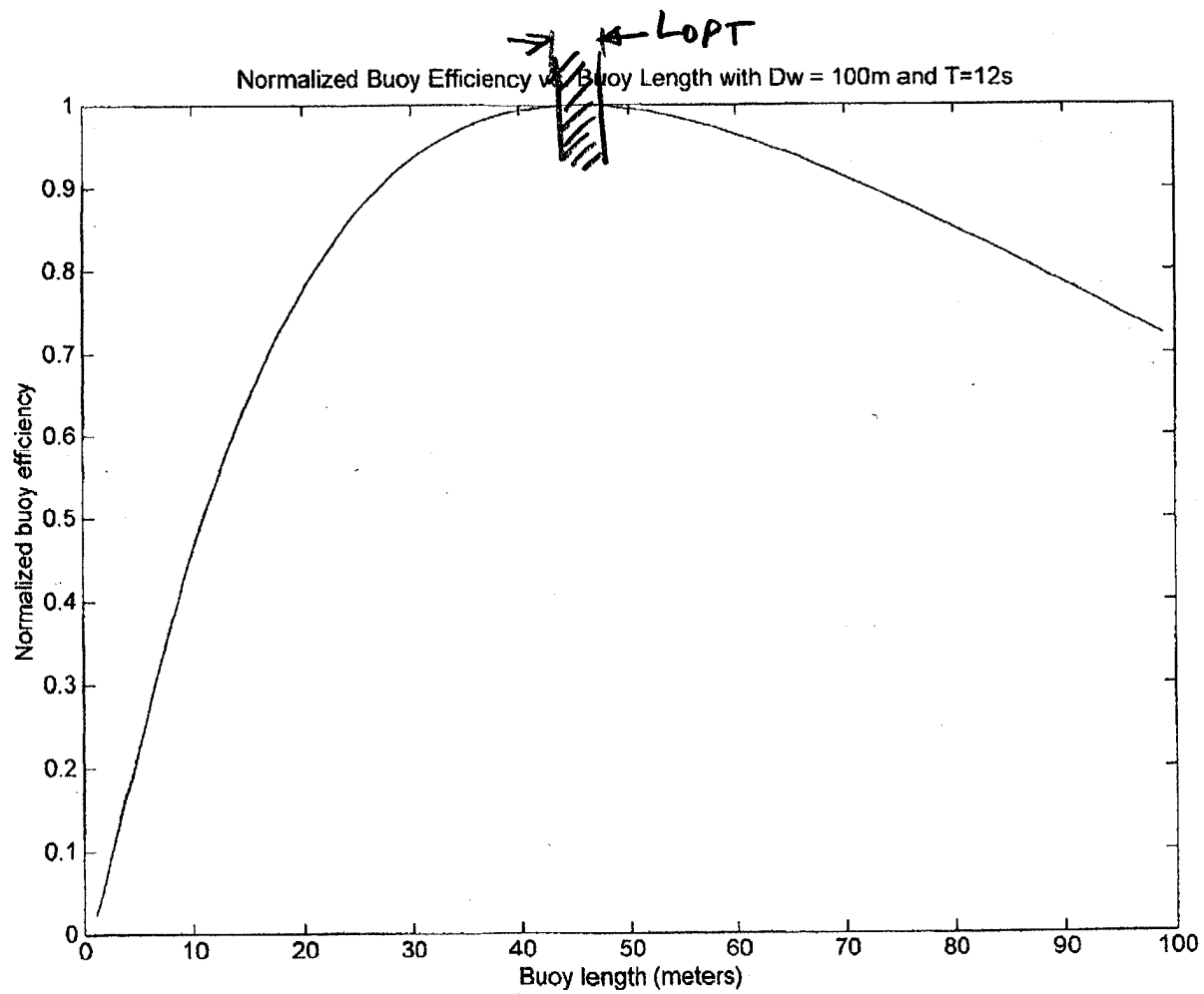


FIG 12

20510 892400T

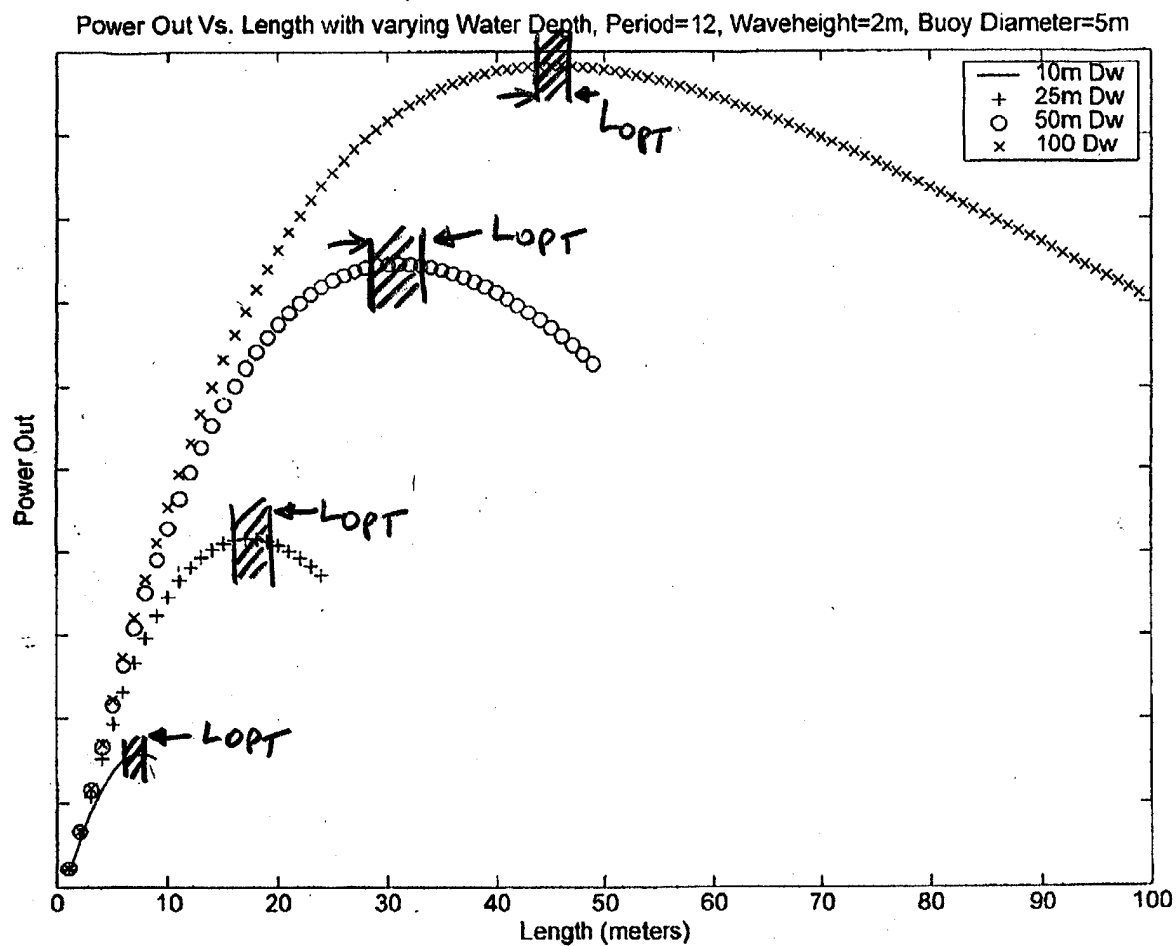


FIG. 13

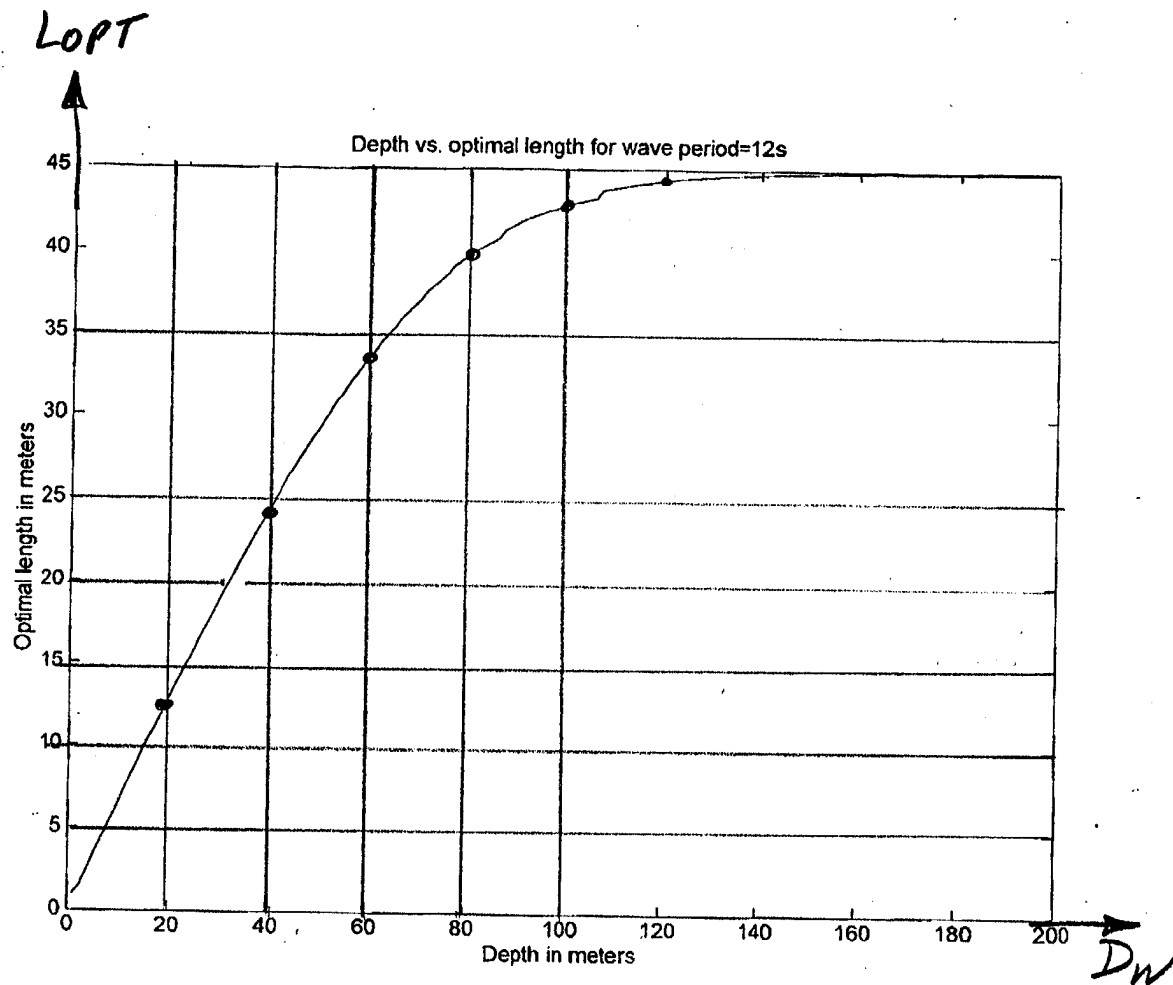


FIG 14

20510-2344007

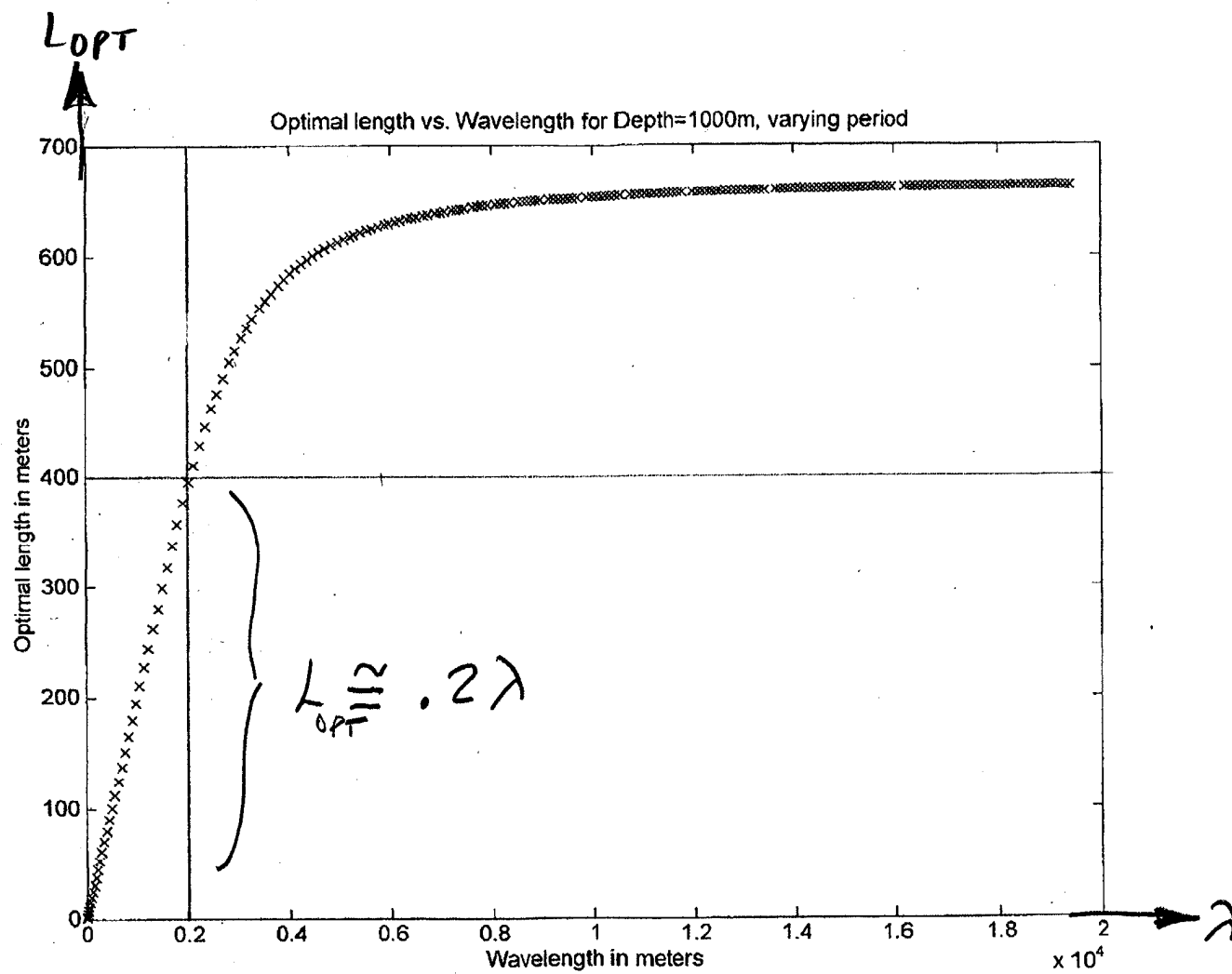


FIG 15